Programmer Analyst I
Programmer Analyst II

General Information	
Classification Code:	TCHANL
Effective Date:	April 5, 2022
Pay Grade:	C42-C43
FLSA Status:	Exempt

Position Summary

The Programmer Analyst performs systems analysis and computer programming for the design, development, implementation, and maintenance of application software systems to meet the goals and objectives of the customer served. Performs programming, coding, testing, and validating activities. Coordinates application software implementation and/or development and enhancement projects. Coordinates the delivery of technical information to departments, outside vendors, and developers. Performs other duties of a similar level.

Classification Characteristics

The Programmer Analyst positions fall under the Technical Analyst classification. Technical Analysts make process decisions and decide how to best achieve the objectives, standards or guidelines established at higher levels and may include lead responsibilities for lower-level staff. The Technical Analyst is a broad professional classification that encompasses incumbents engaged in a wide range of professional and technical duties in support of the City.

Programmer Analyst I – Employees at this level generally have minimal professional experience and perform more day-to-day routine and recurring activities for which there are defined processes, procedures, instructions, models, and precedents. As experience is acquired, employees are expected to perform with increasing independence. This level requires a knowledge of the fundamental concepts, practices, and procedures. Work is routine, and instructions are usually detailed. Little evaluation, originality or ingenuity is required. Examples of work performed at this level include initial validation testing in different environments for patch or tax update; coordinate system downtime with users and testers; and data extraction/ETL from PeopleSoft to another format like Excel or vice-versa.

Programmer Analyst II – This is the journey level in the Technical Analyst series. The Programmer Analyst II differs from the lower level by the complexity, sensitivity, independence, and diversity of assignments. Employees perform work that is varied and may be somewhat difficult in nature. They have full responsibility for a variety of diverse activities, including developing and/or refining policies, procedures, and related items. Employees have also demonstrated the knowledge and the ability to deal independently with complex and sensitive issues. They lead or manage small to mid-sized projects, work independently with minimal supervision, and receive only occasional instructions or assistance as new or unusual situations arise. May assist with evaluating progress and recommending major changes in procedures. Examples of work performed at this level include minor code changes to existing SQR; minor PeopleSoft UI changes - add or modify fields to screens, etc.; and developing new queries via ad hoc requests.

After an employee has been employed at the entry level in a flexibly staffed classification for a period of at least one year, the employee may be advanced to the journey level subject to the following:

- The employee meets the minimum qualifications for the journey level.
- The employee is performing journey level duties at an acceptable level.

Essential Duties	
The duties listed below are a typical sample; position assignments may vary.	
1	Organizes, facilitates, and participates in meetings with stakeholder groups to assess issues and evaluate opportunities regarding the nature of the needs a computer program is to address. Works with users to design interfaces and develop program processes. Assist users in performing analysis and understanding system capabilities by evaluating existing processes and procedures. Interview or survey workers, observe job performance, or perform the job to determine what information is processed and how it is processed.
2	Assess the usefulness of pre-developed application packages and adapt them to a user environment. Conducts analysis on best practices and trends related to software, hardware, and networking systems, and formulates recommendations. Recommends new equipment or software packages as needed. Read manuals, periodicals, and technical reports to stay current and to develop programs that meet staff and user requirements. Specify inputs accessed by the system and plan the distribution and use of the results.
3	Prepares a variety of reports summarizing project, study, and program data including cost-benefit and return-on-investment analyses to aid in decisions on system implementation, and detailed workflow charts and diagrams that describe input, output, and logical operations. Converts information into a series of instructions coded in a computer language. Creates and maintains comprehensive project documentation. Compiles and write documentation of program development and subsequent revisions, inserting comments in the coded instructions so others can understand the program.
4	Test, maintain, and monitor computer programs and systems. Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct. Troubleshoot programs and system malfunctions to restore normal functioning. Correct errors by making appropriate code changes and rechecking to ensure that the desired results are produced.
5	Train staff and users to work with computer systems and programs. Write or contribute to instructions or manuals to guide end users. Maintains training materials and user manuals.
6	Performs oversight of contracts; manages relationships with vendors to facilitate migration, implementation, and support of new and upgraded systems; plans and schedules project timelines.
7	Interprets and applies applicable Federal, State, and Local laws, rules, regulations, policies, and procedures to ensure compliance.
8	Acts as a representative on committees, interagency task forces, and special projects as assigned. Responds to and resolves inquiries and complaints.
9	Performs other duties of a similar nature or level.

Functional Specific Responsibilities

N/A

Qualifications

Minimum Qualifications:

- Programmer Analyst I – Bachelor's Degree in a related field and 0-2 years of relevant professional experience or an equivalent combination of education and experience.
- Programmer Analyst II – Bachelor's Degree in a related field and 2-5 years of relevant professional experience or an equivalent combination of education and experience.

Licensing/Certifications:

- N/A

Technology Skills:

- Cloud-based data access and sharing software — Microsoft SharePoint; Slack
- Data base management system software — Microsoft SQL Server Management Studio: Oracle SQL Developer; Elasticsearch

Qualifications

- Database reporting software — Microsoft SQL Server Reporting Services SSRS; Oracle Business Intelligence Suite; SAP Crystal Reports; Plateau; Microsoft Excel Power Pivot; Microsoft Power BI
- Data base user interface and query software — Transact-SQL; Oracle PL/SQL
- Document management software — Adobe Systems Adobe Acrobat; Virage VS Archive; Laserfiche
- Enterprise application integration software —Microsoft SQL Server Integration Services SSIS; Oracle Fusion Middleware
- Enterprise resource planning ERP software —PeopleSoft Financials/Supply Chain Management, PeopleSoft Human Resources; Tyler Technology Munis; Banner ERP
- Object oriented Programming Languages — MS.Net; Java, C++. XML, HTML
- Office suite software — Microsoft Office (Excel, Word, Access etc.)

Knowledge Required:

- Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Skills:

- Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.
- Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Coordination — Adjusting actions in relation to others' actions.
- Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Learning Strategies — Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
- Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations or applications to make improvements or take corrective action.
- Programming — Writing computer programs for various purposes.
- Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
- Systems Analysis and Evaluation — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes. Identifying indicators of system performance.
- Troubleshooting — Determining causes of operating errors and deciding what to do about it.
- Communication — Communicating effectively in writing and orally as appropriate for the needs of the audience.

Abilities:

- Deductive Reasoning — The ability to apply general rules to specific problems to produce answers that make sense.
- Fluency of Ideas — The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
- Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Mathematical Reasoning — The ability to choose the right mathematical methods or formulas to solve a problem.
- Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Oral Expression — The ability to communicate information and ideas in speaking so others will understand.

Qualifications

- Originality — The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing that there is a problem.
- Selective Attention — The ability to concentrate on a task over a period of time without being distracted.
- Speech Clarity — The ability to speak clearly so others can understand you.
- Speech Recognition — The ability to identify and understand the speech of another person.
- Written Comprehension — The ability to read and understand information and ideas presented in writing.
- Written Expression — The ability to communicate information and ideas in writing so others will understand.

Physical Requirements

Key	None 0% (0 hrs.)	Seldom 1-10% (Up to 1 hrs.)	Occasionally 11-35% (Up to 3 hrs.)	Frequently 36-75% (3-6 hrs.)	Continuous 76-100% (6+ hrs./day)

	0%	**1-10%**	**11-35%**	**36-75%**	**76-100%**		**0%**	**1-10%**	**11-35%**	**36-75%**	**76-100%**
BODY POSITIONS						**PUSH/PULL**					
Standing		X				0-10 lbs.			X		
Sitting					X	11-20 lbs.		X			
Walking – Even Surface		X				21-50 lbs.		X			
Walking – Uneven Surface	X					51-75 lbs.	X				
Kneeling	X					76-100 lbs.	X				
MOVEMENTS						**ENVIRONMENTAL HAZARDS**					
Bending/Stooping		X				Indoors					X
Twisting		X				Outdoors	X				
Crawling	X					Dust	X				
Squatting/Crouching	X					Fumes/Odors/Gasses	X				
Balancing	X					Chemical Agents	X				
Reach – Overhead	X					Biological Agents	X				
Reach – Forward		X				Noise – Low		X			
Reach – Backward		X				Noise – Moderate	X				
Climbing – stairs	X					Noise – High	X				
Climbing - ladder	X					Low Light	X				
USE OF HANDS						Heat	X				
Grasping – whole hand		X				Cold	X				
Grasping – pinch grip		X				Restricted workspace					
Fine manipulation/feeling			X			Vibration – whole body					
Keyboarding					X	Vibration - extremity					
LIFT/CARRY						**JOB SPECIFIC**					
0-10 lbs.			X			Driving – vehicle/equipment	X				
11-20 lbs.		X				Operate foot controls				X	
21-50 lbs.		X				Seeing				X	
51-75 lbs.	X					Talking			X		

Physical Requirements											
76-100 lbs.	X					Hearing		X			
						Extended work hours	X				

Classification History

Created 2012.01
2022.04 – Revisions by HR

I have reviewed the job description.

Employee: Name_____ Signature _____ Date _____